

## VOLUME CONTENTS

### *Volume 259*

#### **No. 1**

N.I. ROVENSKAYA / Populations of Hydrogen-Like Atoms or Ions at Highly Excited Levels due to Radiation of Thermal Sources	1-14
Md.K. ALAM, A.R. CHOWDHURY and S.N. PAUL / On the Characteristics of Wave Propagation in a Magnetized Dusty Plasma with Streaming of Electrons and Ions	15-30
E.S. CORCHERO / White Dwarfs with Anisotropic Pressure in Post-newtonian Gravity	31-43
N.D. CARANICOLAS and G.I. KARANIS / Chaos in Barred Galaxy Models	45-56
P. MARTINEZ and R. MEDUPE / Discovery of 30-Min Oscillations in the AP SR (EUCR) Star HD 75425	57-65
R.G. LIN and J.H. FAN / Infrared Variation of BL Lacertae Object PKS 0735+178	67-76
T.J. KALVOURIDIS / Parametric Dependence of the Stationary Solutions in the Restricted 2+2 Body Problem	77-90
S. RAM and S.K. TIWARI / Inhomogeneous Plane Symmetric Models in a Scalar-Tensor Theory	91-97
N.C. WICKRAMASINGHE and F. HOYLE / Miller-Urey Synthesis in the Nuclei of Galaxies	99-103
List of Forthcoming Papers	105
The Kluwer LaTeX Style File	107-108

#### **No. 2**

N.I. SINGH and CH.G. SINGH / Cosmological Massive Scalar Field Interacting with Viscous Fluid	109-116
I.A. BARGHOUTH, A.R. BARAKAT and A.M. PERSOON / The Effects of Altitude-Dependent Wave Particle Interactions on the Polar Wind Plasma	117-140
M.I. EL-SAFTAWY, M.K.M. AHMED and Y.E. HELALI / The Effect of Direct Solar Radiation Pressure on a Spacecraft of Complex Shape. <i>I. The Equations of Motion</i>	141-149
M.I. EL-SAFTAWY, M.K.M. AHMED and Y.E. HELALI / The Effect of Direct Solar Radiation Pressure on a Spacecraft of Complex Shape. <i>II. The Solutions</i>	151-171
L.A. MILONE and D.C. MERLO / Partition Functions of the Light Elements (H to NA), a Revision	173-189

Ü. KIZILOĞLU, A. BAYKAL, M. ALEV and E. GÖĞÜŞ / The Spectrum and Dips of RE 0751+14: a Joint Evaluation of ROSAT and ASCA Archival Data	191-203
N.C. WICKRAMASINGHE and F. HOYLE / The Astonishing Redness of Kuiper-Belt Objects	205-208
List of Forthcoming Papers	209
The Kluwer LaTeX Style File	211-212

**No. 3**

J.D. COHN / Living with Lambda	213-234
L. HERRERA and J. MARTÍNEZ / Dissipative Collapse through the Critical Point	235-253
R. TOMASCHITZ / Ether, Luminosity and Galactic Source Counts	255-277
I. KÜÇÜK, N. KIZILOĞLU and R. CIVELEK / Early Pre-Main Sequence Evolution of Low Mass Stars	279-284
L. PAN and M. CAO / Study on the Period Changes of XY Leonis	285-293
V.L. OKNYANSKIY / Variable Radio Echoes from a Jet in QSO 0957+561. II. Statistical Significance of the Result	295-299
A.A. SEN and N. BANERJEE / Gravitational Field of a Stationary Circular Cosmic String Loop	301-307
R.J. NEMIROFF / Attributes of Gravitational Lensing Parallax	309-315
G.-L. HUANG, Z.-H. QIN, G. YAN, Q.-J. FU and Y.-Y. LIU / The Energetic Spectrum of Non-Thermal Electrons in an Acceleration Region Calculated from a Solar Microwave Type III Burst with Both Positive and Negative Frequency Drifts	317-326
List of Forthcoming Papers	327
The Kluwer LaTeX Style File	329-330

**No. 4**

V.V. USOV and M.V. SMOLSKY / Particle Acceleration and High-Frequency (X-Ray and $\gamma$ -Ray) Emission in the Jets of Active Galactic Nuclei	331-341
M. UMEZU / Hydrogen Flux in the Semiconvection Zone of the Massive Main Sequence Stars	343-354
H. DEHNEN and R.N. GENSHEIMER / Thermalized Newtonian Bose Stars	355-369
A.I. ARBAB / Cosmological Implications of the Bulk Viscous Model with Variable $G$ and $\Lambda$	371-378

N.C. WICKRAMASINGHE and F. HOYLE / Microdiamonds and the Ultraviolet Extinction of Starlight	379-383
N.C. WICKRAMASINGHE and F. HOYLE / Infrared Evidence for Panspermia: An Update	385-401
Y.W. KANG and J. KIM / Unique Solution of R Canis Majoris	403-413
D. BASU / Are Some High Redshift Galaxies Actually Blueshifting?	415-420
K. NAGARAJAN and N. RAJAMANICKAM / Franck-Condon Factors and r-Centroids of Certain Band Systems of Astro Physical Molecules SO and TiO	421-425
Z. GU / An Interpretation of the Non-Tidal Secular Variation in the Earth Rotation: The Interaction Between the Solar Wind and the Earth's Magnetosphere	427-432
P.M.S. NAMBOODIRI, K.S. SASTRY and K.S.V.S. NARASIMHAN / N-Body Simulation of a Deeply Penetrating Collision Between Unequal Galaxies	433-444
List of Forthcoming Papers	445
Volume Contents	447-449
The Kluwer LaTeX Style File	451-452



